

COASTAL CONSERVANCY

Staff Recommendation
October 5, 2006

ALAMEDA CREEK FLOW STUDIES

File No. 06-076-01
Project Manager: Brenda Buxton

RECOMMENDED ACTION: Authorization to disburse up to \$80,000 to Alameda County Water District and \$40,000 to the Center for Ecosystem Management and Restoration (CEMAR) to manage and conduct the technical studies of water flows necessary to restore steelhead fisheries to Alameda Creek, Alameda County.

LOCATION: Alameda Creek watershed, Alameda, Contra Costa, Santa Clara Counties (Exhibit 1)

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Map

Exhibit 2: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160-65 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed one hundred twenty thousand dollars (\$120,000). Up to eighty thousand dollars (\$80,000) shall go to the Alameda County Water District and up to forty thousand dollars (\$40,000) shall go to the Center for Ecosystem Management and Restoration to manage and conduct technical studies necessary to determine water flows for restoration of steelhead fisheries to Alameda Creek, subject to the condition that, prior to the disbursement of Conservancy funds to each entity, Alameda Water District and the Center for Ecosystem Restoration shall submit for the review and written approval of the Executive Officer of the Conservancy project work programs, budgets and timelines, and the names of any contractors and subcontractors to be retained to carry out the project work.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the purposes and criteria set forth in of Chapter 4.5 of Division 21 of the California Public Resources Code (Sections 31160-31165) regarding the Conservancy's mandate to address resource goals of San Francisco Bay Area;
2. The proposed project is consistent with the Project Selection Criteria and Guidelines and adopted by the Conservancy on January 24, 2001; and
3. The Center for Ecosystem Management and Restoration is a private, nonprofit organization incorporated under 501(c)(3) of the U.S. Internal Revenue Service Code and has purposes consistent with Division 21 of the Public Resources Code.

PROJECT SUMMARY:

Staff recommends authorization to disburse up to \$120,000 to Alameda County Water District (ACWD) and the Center for Ecosystem Management and Restoration (CEMAR) manage and conduct technical studies of water flows necessary to restore steelhead fisheries to Alameda Creek, Alameda County.

Significant anadromous fish runs once existed in Alameda Creek, the largest tributary to San Francisco Bay outside of the Delta. Much of the upper watershed is protected open space with suitable fish rearing and spawning habitat. However, the past 80 years of urbanization, water diversions, and flood control projects have created migration barriers, changed the hydrology of the creek, and eliminated the fish runs. Despite these changes, anadromous fish, mostly steelhead, have been identified trying to migrate upstream in Alameda Creek nearly every year since 1998. Unfortunately, these fish are prevented from reaching available spawning habitat by a variety of obstacles. Since 1999, the Alameda Creek Fisheries Restoration Work Group (Work Group), made up of local flood control agencies, water supply agencies, state and federal resource agencies, and environmental groups, has been seeking ways to overcome these obstacles to fish migration.

The Work Group's planning efforts to date have focused largely on barrier removal. (See Project History for more information about these efforts.) However, while investigating barrier removal options, it has become clear to the Work Group that more information was needed about existing hydrologic conditions of Alameda Creek and how water management could be changed to benefit fishery and riparian resources. This information about existing and possible future water flows is needed for both final design of any passage structure but also to ensure that there are sufficient flows in the creek to provide suitable temperatures and habitat.

The proposed project anticipates \$80,000 of the \$120,000 to fund the ACWD (which is handling technical contracts for the Work Group) and, matched by \$120,000 from other sources, these funds will be used to hire an independent firm with biological and hydrogeomorphic expertise. Due to the complex nature of these technical studies, the flows studies have been broken into phases. In the first phase, the technical experts hired by ACWD will create a detailed scope for the work necessary to estimate the range, magnitude, timing, duration and frequency and location of flows necessary to restore steelhead fisheries (as well as other native fish and riparian species) while minimizing the impacts to water supply. In the second phase, the consultants will take advantage of the availability of extensive existing data and will summarize current hydrologic

and geomorphic conditions in the watershed and collect necessary additional data. The purpose of this second phase will be to develop a common understanding of the existing conditions in the watershed that is agreed to by all the Work Group members. This shared understanding of the watershed conditions will lay the groundwork for the third, and last, phase of the flow studies. The final phase will consist of development and analysis of specific water management alternatives, including operational, engineering and natural resource strategies, that will allow the restoration of a steelhead fishery while minimizing the impacts to water supplies.

The remaining \$40,000 of the \$120,000 of this proposed authorization will fund the Center for Ecosystem Management and Restoration (CEMAR) for project management and coordination of the technical work undertaken by both the independent consultants hired by the Work Group and the water agencies' technical experts. CEMAR has undertaken technical studies on fisheries issues in this watershed and elsewhere, and has provided technical and administrative support to the Alameda Creek Fisheries Restoration Work Group over the last six years.

Site Description: Alameda Creek drains nearly 700 square miles ranging from Mt. Diablo in the north to Mt. Hamilton in the south (Exhibit 1). The lower, urban portions of the watershed include the Cities of Hayward, Fremont, Livermore, Pleasanton, Dublin, San Ramon, Newark, and Union City. The upper watershed features mostly undeveloped grass and woodlands including several major regional parks managed by the East Bay Regional Parks District and the City of San Francisco Public Utilities Commission watershed lands.

The upper watershed of Alameda Creek, while relatively undeveloped, has been extensively modified by water delivery infrastructure. The City of San Francisco Public Utilities Commission operates Calaveras and San Antonio dams. In the lower watershed, the Alameda County Water District impounds and diverts water for groundwater recharge that then serves local residents.

A flood control channel confines the lower 11 miles of Alameda Creek. Adjacent flood control levees feature heavily used pedestrian and bicycle trails that connect with the Bay Trail at the Coyote Hills Regional Park. At the mouth of Alameda Creek, the former salt ponds to the north are part of the South Bay Salt Ponds Restoration project.

Project History: Earlier collaborative efforts to restore steelhead to Alameda Creek in the 1980's were unsuccessful. However, the listing of Central California Coast steelhead as a threatened species and the continuing presence of these steelhead in the lower portion of the creek have renewed interest in protecting and enhancing steelhead by all the Alameda Creek stakeholders. For the past six years, Work Group members have focused largely on answering technical questions and finding funding for fish passage projects. Of particular concern has been the grade control structure ("the BART weir") constructed after the channel was straightened as part of a federal flood control project and ACWD's instream rubber dams (used for groundwater recharge). ACWD has spent \$37,000 on designs for fish passage facilities (ladders, screens, etc.) at their facilities in the flood control channel. The Conservancy has spent \$100,000 investigating a "fishway" design as a possible alternative means of passage over the BART weir. Alameda County Flood Control Agency recently hired a fish passage expert to compare the two alternatives. To help fund design and construction of these fish passage projects, the Work Group has sought funding from a variety of sources. Initially the Work Group hoped to work with the US Army Corps of Engineers' 1135 process to secure funding but cutbacks to this program made

this funding source unavailable. While unsuccessful with a CalFed application, ACWD did receive a total of \$1 million from the Fish and Wildlife Foundation to remove and re-route some the infrastructure associated with its water operations in order to enhance fish passage. In addition, ACWD has an application pending from Proposition 50, Chapter 8 (Integrated Regional Water Management Planning) for \$1.2 million to address fish passage past two currently unscreened diversions. Once Work Group members have determined the best means of providing passage over the BART weir, they will work cooperatively to secure funding from state and federal as well as local sources.

PROJECT FINANCING:

Coastal Conservancy	\$120,000
Alameda County Water Agency	30,000
Pacific Gas and Electric (PG&E)	30,000
San Francisco Public Utilities Commission (SF PUC)	30,000
Zone 7 Water Agency	<u>30,000</u>

Total Project Cost

\$240,000

Technical studies required for the design and construction of barrier removal or fisheries restoration projects are consistent with the proposed funding source which is the California Clean Water, Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002 (Proposition 40). This funding source may be used for rehabilitation, restoration, protection, and development of land and water resources in accordance with the provisions of the Conservancy's enabling legislation, Division 21 of the Public Resources Code. As discussed below, the project is consistent with Chapter 4.5 of Division 21. Proposition 40 also requires the Conservancy to give priority to grant projects with matching funds. This proposed authorization is being matched on a one-to-one basis.

To date, the Conservancy has contributed a total of \$145,000 towards fish passage efforts in Alameda Creek. In 1999, the Conservancy authorized \$25,000 towards a \$60,000 restoration feasibility study, which determined that, with removal of fish passage barriers, sufficient habitat exists in Alameda Creek to sustain a population of steelhead. In 2000, the Conservancy spent \$20,000 on a genetics study of the rainbow trout in the upper watershed which confirmed they are descendants of ocean-going steelhead. In 2002, the Conservancy authorized \$100,000 to conduct a study of a fishway as an alternative to construction of a fish ladder at the BART weir.

Conservancy funding has been matched by funding from the other members of the Fisheries Work Group. The ACWD and Alameda County cost-shared a \$35,000 study for the design of the fish ladder. In addition, ACWD has spent \$125,000 and the San Francisco Public Utilities Commission over \$100,000 on fisheries studies to furnish the Work Group with much-needed data and to provide fish-friendly guidance for their water operations. Alameda County has spent \$250,000 on work group administration in addition to extensive staff time. The state Department of Fish and Game has provided an \$83,000 grant to the County, which enabled CEMAR to provide Work Group technical support and write a draft the Restoration Plan. The nonprofit Alameda Creek Alliance has spent over \$144,000 in addition to over 1,000 hours of staff time to

provide public education about the steelhead recovery effort. Finally, as mentioned above, ACWD has received \$1 million to remove barriers associated with water operations. If this project is approved, the Conservancy's total contribution to date toward restoring steelhead to Alameda Creek would be \$225,000, matched by nearly \$1.6 million from other agencies.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed study would be undertaken pursuant to Chapter 4.5 of Division 21 of the Public Resources Code (Sections 31160-31165), which directs the Conservancy to address the resource and recreational needs of the San Francisco Bay Area in a coordinated, comprehensive, and effective way.

This project would implement Section 31162(b) by helping to protect, restore, and enhance natural habitats and connecting corridors, watershed, scenic areas, and other open space resources of regional importance, such as Alameda Creek the largest watershed in the Bay Area outside of the Delta; Section 31162(d) which calls for the Conservancy to promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations for recreational and educational purposes, such as Alameda Creek which flows through several regional parks and has a major pedestrian and bike trail immediately adjacent to the lower reaches; and 31163(b) by participating in and supporting interagency actions and public/private partnerships in the San Francisco Bay Area to implement long-term resource goals, such as the Alameda Creek Fisheries Work Group. This project also implements Section 31162 (c) by 1) implementing the San Francisco Bay Plan and the Alameda County General Plan, 2) serving a regional constituency of three counties and a variety of agencies and nonprofit groups, 3) being implemented in a timely way, 4) providing opportunities for steelhead restoration that could be lost if the flow studies are not immediately started, and 5) including matching funds.

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

This project will help implement Goal 10, Objective B of the Conservancy's Strategic Plan by providing the necessary technical information to create a water management plan for restoration of steelhead fish in the approximately 700 square mile Alameda Creek watershed.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

1. **Required Criteria**
2. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
3. **Consistency with purposes of the funding source:** See the "Project Financing" section above.

4. **Support of the public:** The proposed study is supported by a diverse group of stakeholders. The Work Groups members consist of Alameda County Public Works Agency, National Marine Fisheries Service, California Department of Fish and Game, representatives of local cities and three water agencies: Alameda County Water District, the City of San Francisco's PUC, and Alameda County's Zone 7, as well as American Rivers, Natural Resources Defense Council (NRDC) and the Alameda Creek Alliance, a coalition of environmentalists, anglers, and recreational users.
5. **Location:** Alameda Creek, the largest tributary to San Francisco Bay outside of the Delta, falls within the San Francisco Bay Area Conservancy's jurisdiction. Alameda Creek empties into the Bay in the City of Fremont, in southeast San Francisco Bay (see Exhibit 1).
6. **Need:** The financial support and partnership of the Conservancy is critical for the success of this project. Other Work Group members have committed matching funds to these studies, but without Conservancy funds and participation the Work Group would not be able to complete the flow studies.
7. **Greater-than-local interest:** Alameda Creek, the largest tributary to San Francisco Bay, presents an opportunity to restore a resource of regional importance: steelhead fish of the California Central Coast ESU (Evolutionarily Significant Unit). In addition, Alameda Creek flows through several regional parks at its mouth and in the upper watershed which are visited by people from through out the SF Bay region.

Additional Criteria

8. **Urgency:** Several of the fish blocked from reaching spawning habitat in Alameda Creek have been identified as steelhead (*Oncorhynchus mykiss*) from the federally and state-listed threatened Central California Coast ESU. To restore this threatened species, it is critical that the extensive technical analysis necessary for building passage structures and creating new water management plans start as soon as possible.
9. **Leverage:** See the "Project Financing" section above.
10. **Conflict resolution:** Despite the long-running conflict between water diversions, flood control, and the habitat needs of a threatened species on Alameda Creek, the Work Group members have been working together successfully for the last few years to restore steelhead to the stream. These flows studies are critical to the restoration of steelhead in Alameda Creek.
11. **Innovation:** This is the first watershed in the Bay Area for the water managers to voluntarily collaborate with regulatory agencies and environmental groups on water flows management in order to restore steelhead.
12. **Readiness:** The project will commence immediately.
13. **Realization of prior Conservancy goals:** See "Project History" above.

ALAMEDA CREEK FLOW STUDIES

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

Most of the Alameda Creek watershed is outside of the jurisdiction of the San Francisco Bay Conservation and Development Commission. However, the Bay Plan does specifically state, “the benefits of fish and wildlife in the Bay should be insured for present and future generations of Californians,” and “specific habitats that are needed to prevent the extinction of any species, or to maintain or increase any species that would provide substantial public benefits, should be protected. . . .” The flow studies are part of an effort to restore steelhead, a threatened species, to Alameda Creek and are consistent with these two policies.

Restoration of steelhead is also consistent with Alameda County’s General Plan. The General Plan has several management objectives for regions of environmental significance, such as Alameda Creek: the protection, conservation, and promotion of the water resources of Alameda County, the preservation of fish and wildlife habitats, and the protection of natural riparian environments are. Furthermore, the General Plan states “the long-term preservation of natural and seminatural riparian areas and their wildlife habitat shall be a guiding criterion in public decisions.”

COMPLIANCE WITH CEQA: The project is statutorily exempt from the provisions of the California Environmental Quality Act (CEQA) because it involves only feasibility or planning studies for possible future actions, as indicated in 14 Cal. Code of Regulations Section 15262. Upon approval, staff will file a Notice of Exemption.